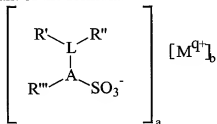


IMPROVED ALKYL BENZENESULFONATES SURFACTANTS

ABSTRACT OF THE DISCLOSURE

A surfactant composition comprising:

- alkylarylsulfonate surfactant system comprising at least two isomers of the
5 alkylarylsulfonate surfactant of the formula:



wherein:

- L is an acyclic aliphatic hydrocarbonyl of from 6 to 18 carbon atoms in total;
M is a cation or cation mixture and q is the valence thereof;
10 a and b are numbers selected such that said composition is electroneutral;
R' is selected from H and C₁ to C₃ alkyl;
R'' is selected from H and C₁ to C₃ alkyl;
R''' is selected from H and C₁ to C₃ alkyl;
any of R' and R'' is nonterminally attached to L and at least one of R' and R''
15 is C₁ to C₃ alkyl; and
A is aryl; and

wherein:

- said alkylarylsulfonate surfactant system comprises two or more isomers
with respect to positions of attachment of R', R'' and A to L;
20 in at least about 60% of said composition, A is attached to L in the position
which is selected from positions alpha- and beta- to either of the two
terminal carbon atoms thereof; and

wherein further said alkylarylsulfonate surfactant system has at least one (preferably
both) of the following properties:

- 25 said alkylarylsulfonate surfactant system has a ratio of nonquaternary to
quaternary carbon atoms in L of at least about 10:1 by weight, when said
quaternary carbon atoms are present; and
there is no more than 40% by weight loss as measured by Hardness
Tolerance Test.